

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

BROWN, Michael, Stanley  
Alpha & Omega  
Chine Croft  
East Hill  
Ottery St. Mary  
Devon EX11 1PJ  
ROYAUME-UNI

TECHNICAL CENTER 1600 2900

JUN 03 2002

RECEIVED

Date of mailing (day/month/year) 17 January 2002 (17.01.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference	
International application No. PCT/GB00/02238	International filing date (day/month/year) 08 June 2000 (08.06.00)

## 1. The following indications appeared on record concerning:

☒ the applicant
 ☒ the inventor
 ☐ the agent
 ☐ the common representative

Name and Address LEONARD, Christopher, Jeremy 71 Shorton Valley Road Paignton Devon TQ3 1RE United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☒ the person
 ☒ the name
 ☒ the address
 ☐ the nationality
 ☐ the residence

Name and Address BONDCO 897 LIMITED Town Quay House 7 Town Quay Southampton Hampshire SO14 2PT United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

**The applicant/inventor appearing in Box 1 has assigned all his rights to the applicant appearing in Box 2. Box 1: applicant/inventor for US only. Box 2: applicant for all designated States except US.**

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer S. Buttay Telephone No.: (41-22) 338.83.38
---	---

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 15 February 2001 (15.02.01)	
<b>International application No.</b> PCT/GB00/02238	<b>Applicant's or agent's file reference</b>
<b>International filing date</b> (day/month/year) 08 June 2000 (08.06.00)	<b>Priority date</b> (day/month/year) 09 June 1999 (09.06.99)
<b>Applicant</b> LEONARD, Christopher, Jeremy	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

03 January 2001 (03.01.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Olivia TEFY Telephone No.: (41-22) 338.83.38
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## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/GB 00/ 02238	08/06/2000	09/06/1999
Applicant		
LEONARD, CHRISTOPHER JEREMY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

## INTERNATIONAL SEARCH REPORT

Intern. Application No.

PCT/JP 00/02238

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 36 11 791 A (MICHEL WOLFGANG;KOLLNY JAN) 22 October 1987 (1987-10-22) the whole document ----	1-10
X	US 3 814 057 A (CALVERT C ET AL) 4 June 1974 (1974-06-04) the whole document ----	1,6-11
X	GB 874 297 A (RUPPRECHT K) 2 August 1961 (1961-08-02) the whole document ----	1,10,11
X	WO 92 00258 A (SILCOCK BRUCE) 9 January 1992 (1992-01-09) page 4, line 7 - line 12 the whole document ----	6-9,12
A	EP 0 093 195 A (LEMONNIER MONIQUE NEE PERRIER) 9 November 1983 (1983-11-09) ----	
A	EP 0 073 173 A (LEMONNIER MONIQUE NEE PERRIER) 2 March 1983 (1983-03-02) ----	
P,X	EP 1 006 124 A (ENTOPHARM CO LTD) 7 June 2000 (2000-06-07) the whole document -----	1-5

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 00/02238

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 19543513 A	12-06-1997	NONE	
DE 4211745 A	07-10-1993	NONE	
DE 4111782 A	15-10-1992	NONE	
US 4405602 A	20-09-1983	RO 74872 A DE 3134454 T EP 0043842 A GB 2079602 A,B WO 8102106 A	01-11-1983 15-07-1982 20-01-1982 27-01-1982 06-08-1981
DE 3611791 A	22-10-1987	NONE	
US 3814057 A	04-06-1974	US 3716371 A	13-02-1973
GB 874297 A		NONE	
WO 9200258 A	09-01-1992	AU 8199191 A GB 2263905 A,B	23-01-1992 11-08-1993
EP 0093195 A	09-11-1983	FR 2525438 A DE 3279764 D JP 58187150 A NO 823550 A	28-10-1983 20-07-1989 01-11-1983 27-10-1983
EP 0073173 A	02-03-1983	FR 2511597 A DE 3280185 D JP 58088317 A	25-02-1983 05-07-1990 26-05-1983
EP 1006124 A	07-06-2000	NONE	

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number  
**WO 00/74693 A3**

(51) International Patent Classification<sup>7</sup>: **A61K 35/64**,  
A23K 1/10, 1/14, 1/18, A23L 1/29, C02F 3/00, C05F  
15/00, A01N 63/00, A61P 37/00

(21) International Application Number: PCT/GB00/02238

(22) International Filing Date: 8 June 2000 (08.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
9913267.2 9 June 1999 (09.06.1999) GB

(71) Applicant and

(72) Inventor: **LEONARD, Christopher, Jeremy** [GB/GB];  
71 Shorton Valley Road, Paignton, Devon TQ3 1RE (GB).

(74) Agent: **BROWN, Michael, Stanley**; Alpha & Omega,  
Chine Croft, East Hill, Ottery St. Mary, Devon EX11 1PJ  
(GB).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,  
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,  
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

(88) Date of publication of the international search report:  
28 June 2001

*For two-letter codes and other abbreviations, refer to the "Guide-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: IMMUNITY GENERATION

(57) Abstract: Immunity generation is effected by a method which includes the use of insect tissues and/or larval forms and derivatives of insects. The invention also provides a method of producing a food source which includes the use of insects and their larvae which act as carriers providing immunity generation as well as protein, energy and biologically active beneficial compounds.

WO 00/74693 A3



# INTERNATIONAL SEARCH REPORT

Inter national Application No

PCT/GB 00/02238

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K35/64 A23K1/10 A23K1/18 A23L1/29  
C02F3/00 C05F15/00 A01N63/00 A61P37/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A23L A23K A01N C05F C02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 195 43 513 A (CLEMENS ANDREAS ;SCHIRRMACHER MARTIN (DE)) 12 June 1997 (1997-06-12) the whole document	1-5
X	DE 42 11 745 A (BOERNER GMBH) 7 October 1993 (1993-10-07) the whole document	1-5
X	DE 41 11 782 A (BAYER GERHARD) 15 October 1992 (1992-10-15) the whole document	1-5
X	US 4 405 602 A (ILIES NICOLAE) 20 September 1983 (1983-09-20) the whole document	1-5
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

15 January 2001

Date of mailing of the international search report

19/01/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Teyssier, B

## INTERNATIONAL SEARCH REPORT

Inter national Application No

PCT/GB 00/02238

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	DE 36 11 791 A (MICHEL WOLFGANG;KOLLNY JAN) 22 October 1987 (1987-10-22) the whole document ----	1-10
X	US 3 814 057 A (CALVERT C ET AL) 4 June 1974 (1974-06-04) the whole document ----	1,6-11
X	GB 874 297 A (RUPPRECHT K) 2 August 1961 (1961-08-02) the whole document ----	1,10,11
X	WO 92 00258 A (SILCOCK BRUCE) 9 January 1992 (1992-01-09) page 4, line 7 - line 12 the whole document ----	6-9,12
A	EP 0 093 195 A (LEMONNIER MONIQUE NEE PERRIER) 9 November 1983 (1983-11-09) ----	
A	EP 0 073 173 A (LEMONNIER MONIQUE NEE PERRIER) 2 March 1983 (1983-03-02) ----	
P,X	EP 1 006 124 A (ENTOPHARM CO LTD) 7 June 2000 (2000-06-07) the whole document -----	1-5

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International Application No

PCT/GB 00/02238

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 19543513 A	12-06-1997	NONE	
DE 4211745 A	07-10-1993	NONE	
DE 4111782 A	15-10-1992	NONE	
US 4405602 A	20-09-1983	RO 74872 A DE 3134454 T EP 0043842 A GB 2079602 A, B WO 8102106 A	01-11-1983 15-07-1982 20-01-1982 27-01-1982 06-08-1981
DE 3611791 A	22-10-1987	NONE	
US 3814057 A	04-06-1974	US 3716371 A	13-02-1973
GB 874297 A		NONE	
WO 9200258 A	09-01-1992	AU 8199191 A GB 2263905 A, B	23-01-1992 11-08-1993
EP 0093195 A	09-11-1983	FR 2525438 A DE 3279764 D JP 58187150 A NO 823550 A	28-10-1983 20-07-1989 01-11-1983 27-10-1983
EP 0073173 A	02-03-1983	FR 2511597 A DE 3280185 D JP 58088317 A	25-02-1983 05-07-1990 26-05-1983
EP 1006124 A	07-06-2000	NONE	

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number  
**WO 00/74693 A2**

(51) International Patent Classification<sup>7</sup>: **A61K 35/64**,  
A23K 1/10, 1/14, 1/18, A23L 1/29, C02F 3/00, C05F  
15/00, A01N 63/00, A61P 37/00

(21) International Application Number: PCT/GB00/02238

(22) International Filing Date: 8 June 2000 (08.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
9913267.2 9 June 1999 (09.06.1999) GB

(71) Applicant and

(72) Inventor: **LEONARD, Christopher, Jeremy** [GB/GB];  
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(74) Agent: **BROWN, Michael, Stanley**; Alpha & Omega,  
Chine Croft, East Hill, Ottery St. Mary, Devon EX11 1PJ  
(GB).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,  
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,  
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— Without international search report and to be republished  
upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: IMMUNITY GENERATION

(57) Abstract: Immunity generation is effected by a method which includes the use of insect tissues and/or larval forms and deriva-  
tives of insects. The invention also provides a method of producing a food source which includes the use of insects and their larvae  
which act as carriers providing immunity generation as well as protein, energy and biologically active beneficial compounds.

WO 00/74693 A2



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference ---	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02238	International filing date ( <i>day/month/year</i> ) 08/06/2000	Priority date ( <i>day/month/year</i> ) 09/06/1999
International Patent Classification (IPC) or national classification and IPC A61K35/64		
Applicant LEONARD, Christopher Jeremy		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
  - I ☒ Basis of the report
  - II ☐ Priority
  - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☒ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand 03/01/2001	Date of completion of this report 07.09.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Peris Antoli, B Telephone No. +49 89 2399 8476 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-18 as originally filed

**Claims, No.:**

1-10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 6-8.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 6-8 are so unclear that no meaningful opinion could be formed (*specify*):  
**see separate sheet**

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes:	Claims 4-5
	No:	Claims 1-3, 9-10

Inventive step (IS)	Yes:	Claims
	No:	Claims 4-5

Industrial applicability (IA)	Yes:	Claims 1-5, 9-10
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**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

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No:      Claims

2. Citations and explanations  
**see separate sheet**

**VI.      Certain documents cited**

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. Independent claim 6 and its dependent claims 7-8 do not meet the requirements of Art. 6 PCT because their subject matter is not supported by the technical contents of the description.
  - 1.1 Although not shown in the present application, there is evidence from the prior art (see D1 to D7 below) that insects and products thereof can be used as food sources and medicaments.
  - 1.2 However, neither in the prior art nor in the present application, is there technical evidence supporting the effect alleged in the present claims 6-8; i.e. that biological waste (including sewage and animal offal) recycled using insects could be safely used as an immune-generating food or medicament.
2. In view of the aforementioned objection, no opinion can be established with regard to novelty, inventive step and industrial applicability of claims 6-8.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

3. Reference is made to the following documents:  
  
D1: DE-A-195 43 513  
D2: DE-A-42 11 745  
D3: DE-A-41 11 782  
D4: US-A-4 405 602  
D5: DE-A-36 11 791  
D6: US-A-3 814 057  
D7: GB-A-874 297
4. Claims 1-3 and 9-10 do not meet the requirements of Art. 33(2) PCT because their

subject matter is not new (see below).

- 4.1 D1 (c. 1, l. 20-27) discloses a medicament obtained from mosquito saliva for treating HIV.

Thus, D1 destroys the novelty of the subject matter of the present claims 2 and 3 [Note that except for the "first medical use", a product is only defined by its components and not its intended use].

- 4.2 D2 (claims 1-2 and c. 1, l. 34) discloses the use of propolis (a natural product obtained from bees) as a medicament for inhibiting the release of inflammatory mediators such as allergens. This, implies the possible use of propolis to treat allergies.

Thus, D2 destroys the novelty of the subject matter of the present claims 1-3.

- 4.3 D3 (claim 1) discloses bee's resin dissolved in ethanol for use as oral immunostimulating agent (i.e. as a medicament).

Thus, D3 also prejudices the novelty of the subject matter of the present claims 1-3.

- 4.4 D4 (see claims 1, 7 and c. 3, l. 24) discloses a product prepared from bee larvae and its use in human nourishment and as poultry food.

Thus, D4 destroys the novelty of the subject matter of the present claims 9 and 10.

- 4.5 D5 (see claims 1-7 and c. 2, l. 24-29 and 31-34) discloses the use of insects, in particular fly-larvae, to prepare animal food, including poultry food, and the ability of said larvae to stimulate the immune system of animals.

Thus, D5 explicitly destroys the novelty of the subject matter of claims 9-10 and implicitly destroys the novelty of the subject matter of the present claims 1-3 (i.e. the use of said larvae as immunostimulating agent/medicament).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/GB00/02238

- 4.6 D6 (see c. 2, l. 21-29) discloses a product made from fly pupae and its use for feeding chicks and hens.

Thus, D6 prejudices the novelty of the subject matter of the present claims 9 and 10.

- 4.7 D7 (see claim 1) discloses a product comprising dried insects and its use to feed birds.

D7 is therefore prejudicial to the novelty of the subject matter of the present claim 9.

5. Claims 4 and 5 meet the requirements of Art. 33(2) PCT because their subject matter is formally new over the prior art cited in the search report.
6. Claims 4-5 do however not meet the requirements of Art. 33(3) PCT, because the formulation of any of the medicinal products disclosed in D1-D3 or D5 in a form suitable for injection or transcutaneous administration merely represent two of the several straightforward ways of administration from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill.
7. Claims 1-5 and 9-10 satisfy the criterion set forth in Art. 33(4) PCT because their subject matter is susceptible of industrial application.

**Re Item VI**

**Certain documents cited**

8. EP-A-1 006 124 (filing date: 02.12.98; publication date: 06.07.00).

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference ---	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02238	International filing date (day/month/year) 08/06/2000	Priority date (day/month/year) 09/06/1999
International Patent Classification (IPC) or national classification and IPC A61K35/64		
Applicant LEONARD, Christopher Jeremy		

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1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 7 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 03/01/2001	Date of completion of this report 07.09.2001.
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel +49 89 2399 - 0 Tx: 523656 eomu d	Authorized officer Peris Antoli, B 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-18 as originally filed

**Claims, No.:**

1-10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 6-8.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 6-8 are so unclear that no meaningful opinion could be formed (*specify*):  
**see separate sheet**

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)                      Yes: Claims 4-5  
   No: Claims 1-3, 9-10

Inventive step (IS)            Yes: Claims  
   No: Claims 4-5

Industrial applicability (IA)   Yes: Claims 1-5, 9-10

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/02238

No: Claims

2. Citations and explanations  
**see separate sheet**

**VI. Certain documents cited**

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

**Re Item III****Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. Independent claim 6 and its dependent claims 7-8 do not meet the requirements of Art. 6 PCT because their subject matter is not supported by the technical contents of the description.
  - 1.1 Although not shown in the present application, there is evidence from the prior art (see D1 to D7 below) that insects and products thereof can be used as food sources and medicaments.
  - 1.2 However, neither in the prior art nor in the present application, is there technical evidence supporting the effect alleged in the present claims 6-8; i.e. that biological waste (including sewage and animal offal) recycled using insects could be safely used as an immune-generating food or medicament.
2. In view of the aforementioned objection, no opinion can be established with regard to novelty, inventive step and industrial applicability of claims 6-8.

**Re Item V****Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

3. Reference is made to the following documents:  
  
D1: DE-A-195 43 513  
D2: DE-A-42 11 745  
D3: DE-A-41 11 782  
D4: US-A-4 405 602  
D5: DE-A-36 11 791  
D6: US-A-3 814 057  
D7: GB-A-874 297
4. Claims 1-3 and 9-10 do not meet the requirements of Art. 33(2) PCT because their

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/02238

subject matter is not new (see below).

- 4.1 D1 (c. 1, l. 20-27) discloses a medicament obtained from mosquito saliva for treating HIV.

Thus, D1 destroys the novelty of the subject matter of the present claims 2 and 3 [Note that except for the "first medical use", a product is only defined by its components and not its intended use].

- 4.2 D2 (claims 1-2 and c. 1, l. 34) discloses the use of propolis (a natural product obtained from bees) as a medicament for inhibiting the release of inflammatory mediators such as allergens. This, implies the possible use of propolis to treat allergies.

Thus, D2 destroys the novelty of the subject matter of the present claims 1-3.

- 4.3 D3 (claim 1) discloses bee's resin dissolved in ethanol for use as oral immunostimulating agent (i.e. as a medicament).

Thus, D3 also prejudices the novelty of the subject matter of the present claims 1-3.

- 4.4 D4 (see claims 1, 7 and c. 3, l. 24) discloses a product prepared from bee larvae and its use in human nourishment and as poultry food.

Thus, D4 destroys the novelty of the subject matter of the present claims 9 and 10.

- 4.5 D5 (see claims 1-7 and c. 2, l. 24-29 and 31-34) discloses the use of insects, in particular fly-larvae, to prepare animal food, including poultry food, and the ability of said larvae to stimulate the immune system of animals.

Thus, D5 explicitly destroys the novelty of the subject matter of claims 9-10 and implicitly destroys the novelty of the subject matter of the present claims 1-3 (i.e. the use of said larvae as immunostimulating agent/medicament).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

---

International application No. PCT/GB00/02238

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D7 is therefore prejudicial to the novelty of the subject matter of the present claim 9.

5. Claims 4 and 5 meet the requirements of Art. 33(2) PCT because their subject matter is formally new over the prior art cited in the search report.
6. Claims 4-5 do however not meet the requirements of Art. 33(3) PCT, because the formulation of any of the medicinal products disclosed in D1-D3 or D5 in a form suitable for injection or transcutaneous administration merely represent two of the several straightforward ways of administration from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill.
7. Claims 1-5 and 9-10 satisfy the criterion set forth in Art. 33(4) PCT because their subject matter is susceptible of industrial application.

**Re Item VI**

**Certain documents cited**

8. EP-A-1 006 124 (filing date: 02.12.98; publication date: 06.07.00).